

California Household Travel Survey: More Californians are Walking, Biking, and Riding Transit

Planning for transportation projects almost requires a crystal ball. It is difficult to plan the maintenance of and improvements to existing bridges, roads, and railroads without knowing what the future holds. To make projections about the future, we can study today's travel trends to forecast what we will need into the future. That's where the [California Household Travel Survey](#)

comes in—the largest and most complex review of its kind. The survey's results show that almost twice as many Californians are walking, biking, or using public transportation than they were in 2000. Such a massive shift in how people travel requires a renewed emphasis on improving the quality of these transportation options.

The Survey

The California Household Travel Survey provides detailed information about the characteristics and travel behavior of households statewide. Caltrans has conducted the California Household Travel Survey about every 10 years since 1991. The most recent survey began January 2012 and ended February 2013. The survey is a partnership between Caltrans, several California state agencies, and regional planning agencies statewide. The study was jointly funded by Caltrans, the Strategic Growth Council, the California Energy Commission, the San Joaquin Valley Air Pollution Control District, and seven regional planning agencies. Pooling state and local funds resulted in one comprehensive statewide database that each agency can use for various purposes.

How the Data was Collected

Survey participants received diaries to record where and when they traveled and how they got to and from their destinations on one random day. To ensure the data represents the entire state population, each household was asked a series of detailed demographic and socioeconomic questions, such as age, gender, income level, travel characteristics, and access to transportation. We can use this information to make good decisions about transportation investments that will make California a better place to live and work.

How the Data is Used

Caltrans and regional transportation planning agencies use the survey data as part of the development process to build models that predict travel demand. Transportation planners use models to estimate future travel demand based on future population and employment estimates. Planners then evaluate whether the existing transportation system can handle that future travel demand. If not, they can test various transportation policies and strategies to determine the best way to meet the state's, as well as each region's, future transportation needs.

Every metropolitan region in California has a modeling process. This process helps planners determine which roads and interchanges may need improvement or where more transit, biking, or walking options are likely needed. These identified improvements eventually become part of planning

documents such as a regional transportation plan. The travel projections are also used by air quality, energy, and transportation agencies to estimate the amount of exhaust emissions generated from travel and test the effect of different strategies and policies on pollution levels and energy consumption.

| Household Size | Number of Households Reporting | Total |
|----------------------------------|--------------------------------|--------|
| 1-person | 10,379 | 24.5% |
| 2-persons | 12,744 | 30.0% |
| 3-persons | 6,939 | 16.4% |
| 4 or more persons | 12,368 | 29.1% |
| Total | 42,431 | 100.0% |
| | | |
| Number of Vehicles per Household | Frequency | Total |
| No vehicle | 3,402 | 8.0% |
| 1 | 13,886 | 32.7% |
| 2 | 15,788 | 37.2% |
| 3 or more | 9,355 | 22.0% |
| Total | 42,431 | 99.9% |

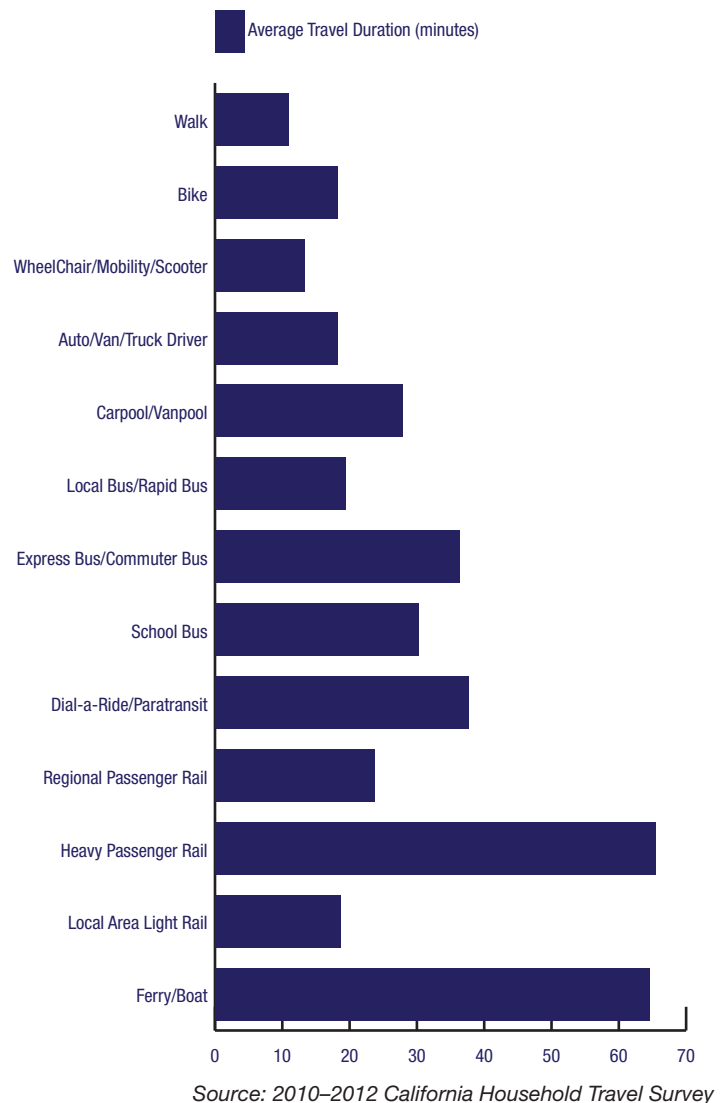
| Mode | 2010–2012 Mode Share | 2000 Mode Share |
|--------------------------|----------------------|-----------------|
| Auto/van/truck driver | 49.3% | 60.2% |
| Auto/van/truck passenger | 25.9% | 25.8% |
| Walk | 16.6% | 8.4% |
| Public transportation | 4.4% | 2.2% |
| Bicycle | 1.5% | 0.8% |
| Private transportation | 0.6% | |
| School bus | 0.6% | |
| Carpool/vanpool | 0.6% | |
| All other | 0.5% | 0.7% |

| Key Trip Statistics | |
|---|------|
| Average household trips per day | 9.2 |
| Average person trips per day | 3.6 |
| Percentage of zero trips per household | 14 |
| Percentage of auto trips | 76.9 |
| Percentage of transit trips | 4 |
| Average trip duration (minutes) | 17.7 |
| Average work trip duration (minutes) | 21.3 |
| Average school trip duration (minutes) | 14.6 |
| Average travel distance (route distance in miles) | 6.8 |

Source: 2010–2012 California Household Travel Survey



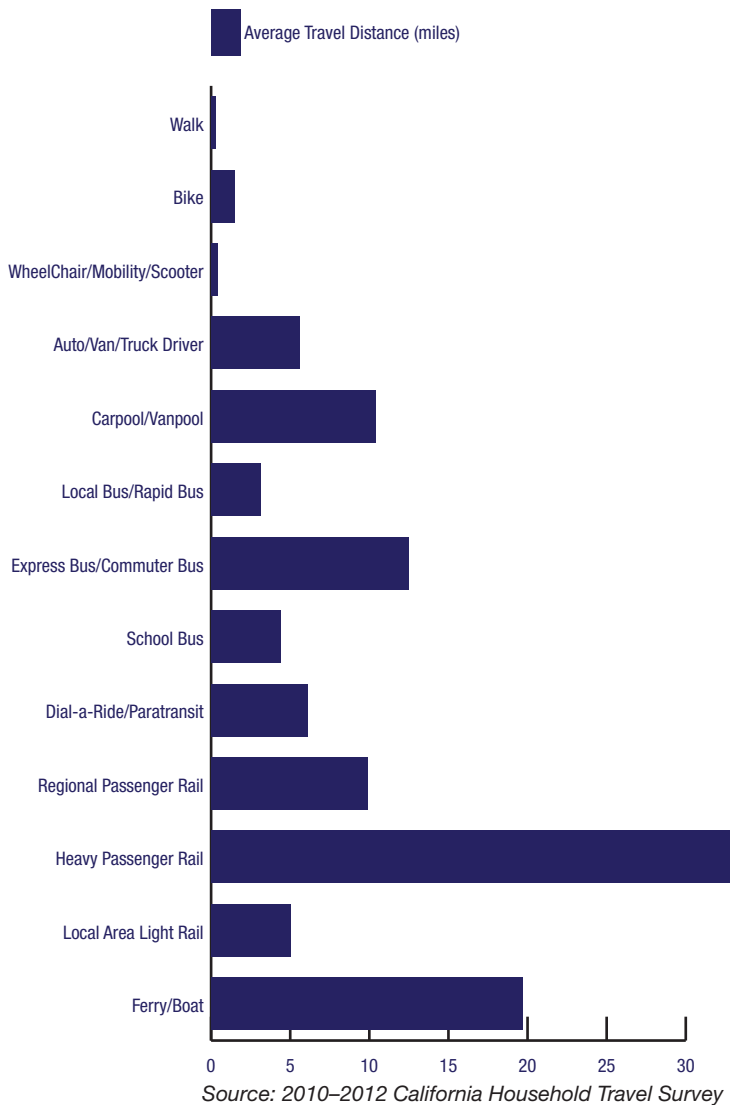
Travel Time by Mode (in minutes)



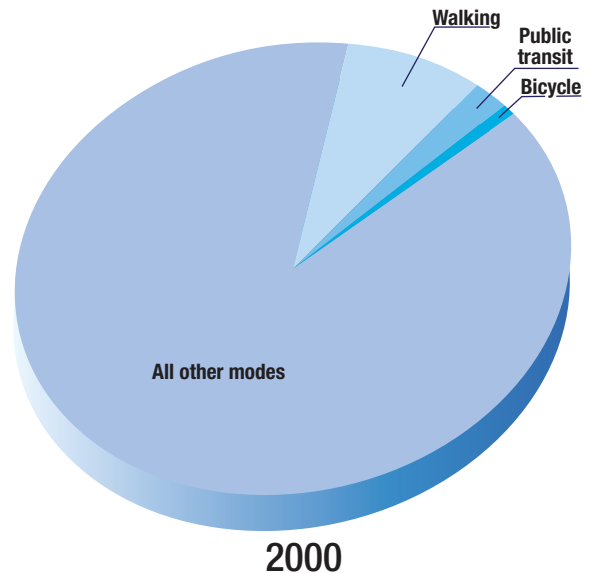
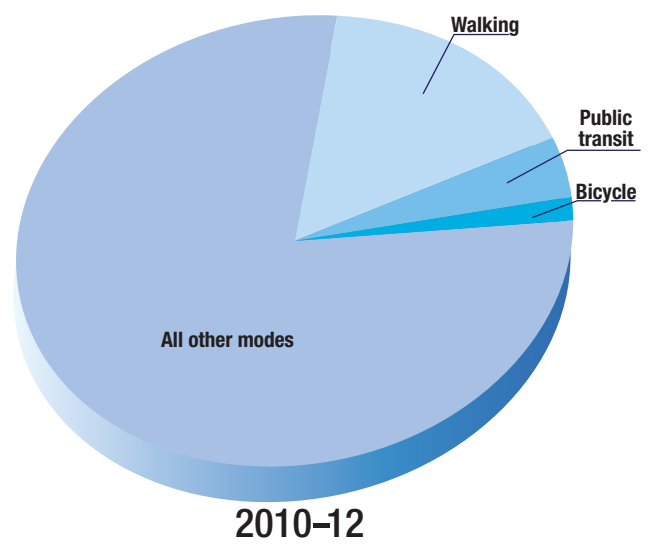
The Findings

The 2012 study provides a snapshot of travel behavior of approximately 109,000 people from more than 42,000 households in California's 58 counties. Although the true benefit of the survey is the development of models to project future travel, the survey itself revealed interesting changes in travel behavior. Nearly 23 percent of household trips were taken by walking, biking, and public transportation. In 2000, that share was only 11 percent. This increase includes a dramatic increase in walking trips, which nearly doubled from 8.4 percent to 16.6 percent of trips. The average number of trips for a household was 9.2, while the average number of trips per person was 3.6.

Travel Distance by Mode (in miles)



Trips by Walking, Biking, and Public Transit have Doubled Since 2000



Source: 2010–2012 California Household Travel Survey

Importance of the Survey

In 2013, California enacted the state's Active Transportation Program, which consolidates existing federal and state transportation programs, including the Transportation Alternatives Program, Bicycle Transportation Account, and State Safe Routes to School, into a single program focused on making California a national leader in active transportation. More Californians are choosing active transportation that has health benefits and cuts greenhouse gases, and this shift in choices requires planning for expanded or

new facilities. Projects such as bicycle and pedestrian paths support sustainable communities and healthier, low-carbon travel choices. This is important in achieving the mobility, safety, and sustainability goals for California's transportation system, and the California Household Travel Survey is helping us plan for that future.

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